CLAIMS

The invention claimed is:

1. A probe assembly comprising:

(a) a conductive signal contact tip, said signal contact tip arranged for selective engagement with a signal contact pad of a device-under-test;

(b) a first signal input port;

(c) a resistor having a first port connected to said signal contact tip and a second port connected to said first signal input port; and

(d) a second signal input port conductively connected to said signal contact tip.

2. The probe assembly of claim 1 further comprising a conductive ground contact tip arranged for engagement with a ground contact pad of said device-under-test when said signal contact tip is selectively engaged with said signal contact pad.

3. A probe assembly comprising:

(a) a conductive first signal contact tip, said first signal contact tip arranged for selective engagement with a signal contact pad of a device-under-test;

(b) a first signal input port;

(c) a resistor having a first port connected to said first signal contact tip and a second port connected to said first signal input port;

(d) a conductive second signal contact tip, said second signal contact tip arranged for engagement with said signal contact pad of said device-under-test when said first signal contact tip is engaged with said signal contact pad; and

(e) a second signal input port conductively connected to said second signal contact tip.

4. The probe assembly of claim 3 further comprising a conductive ground contact tip arranged for engagement with a ground contact pad of said device-under-test when said first signal contact tip is engaged with said signal contact pad.

5. A method of testing a device-under-test, said method comprising the steps of:

(a) engaging a signal contact pad of said device-under-test with a signal contact tip of a probe testing apparatus;

(b) connecting a first port of an impedance matching resistor to said signal contact tip;

(c) conducting a direct current to said signal contact tip; and

(d) conducting a modulation signal to a second port of said impedance matching resistor.

6. The method of claim 5 further comprising the steps of:

(a) blocking a flow of said direct current from said signal contact tip to a source of said modulation signal; and

(b) conducting said direct current from a source to said signal contact tip over a signal path including an inductor, said inductor having a minimal impedance to said direct current and an impedance substantially greater than said device-under-test at a modulation frequency of said modulation signal.

7. The method of claim 5 further comprising the steps of:

(a) blocking a flow of said direct current from said signal contact tip to a source of said modulation signal;

(b) separating a combined signal on said signal contact tip into a direct current component and a modulation signal component; and

(c) terminating a signal path of said modulation signal component.

8. The method of claim 5 further comprising the steps of:

(a) generating a combined signal comprising a direct current component and a modulation signal component;

(b) separating said direct current component of said combined signal from said modulation signal component; and

(c) terminating a signal path of said modulation signal component.